

Remagining tertiary education

From binary system to ecosystem

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ForeWord

This report is offered as a contribution to debate about the future of Australia's tertiary education system. It contains 10 ambitious recommendations which we argue will better equip Australia for the economic and social change that is coming our way.

It is offered in a constructive spirit, to provoke discussion. There is much to celebrate and build upon. Equally, the last 30 years have not all been a history of laurels; and further reform would be needed even if the world were staying the same.

The assemblage of ideas is the authors', but informed by discussion with 52 people, experienced and senior in the tertiary sector, who gave their time freely. The discussions were under Chatham House rules of non-attribution. We list our participants in the Schedule, but I would like to thank them all now. Few might agree with every single idea in this report, but each of the ideas in our recommendations has some support, and many originated with them not us.

There is no such thing as a 'view from nowhere' in education; only a view from somewhere. However, as best we can, we have tried to stay neutral as to sub-sector, grouping and type of provider. Neither fear nor favour is intended in what follows: simply intended is a constructive contribution to a debate Australia has to have.

The report is more concerned with tertiary education than research, hence the title, but research does feature, and is also vital to the nation's prospects.

I am the principal author of the report, but I have worked closely with Andrew Dempster of Proofpoint Advisory, and Mark Warburton, Honorary Senior Fellow, LH Martin Institute. They have many years of experience in government and public service. Combined with my experience at different levels in four Australian universities, we have drawn on our collective judgement about what works and what doesn't in tertiary education and training.

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Professor Stephen Parker AO

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Executive summary

Australia's tertiary system has had many successes to celebrate over the 30 years since the Dawkins Reforms created a unified national system for higher education, and since international students became a vital part of our national life.

Not everything has worked out as intended, and there have been failures along the way, particularly in the vocational education and training (VET) sector, but the starting point is a platform of success.

Despite this, the scale of likely change in our economy and society is such that we must at least contemplate major reforms, building on past successes, remedying failures and designing a coherent tertiary system that will equip Australia for a future that will be different.

There are no easy options and the focus needs to be at the system level rather than at the level of institutions, many of which have done excellent work.

Furthermore, although automation, artificial intelligence (AI) and other technologies will radically re-shape the world, there is no way of knowing what this will mean for education systems. We can certainly speculate: perhaps the future is more about cognitive, practical and social skills than discipline-based knowledge and technique. But perhaps it isn't. No one really knows and to be too confident is to run real risks that we are less ready for a changing world than we could be.

Time to reimagine

Australia needs to reimagine its tertiary system, on the premise that it is behind a "veil of ignorance" about what the future will look like.

Our nation needs to move beyond an unstable and outmoded distinction between higher education and VET, and set the conditions whereby post-secondary school providers can innovate more simply.

We need to move from binary system to ecosystem, with more diversity of providers, organised around the backbone of a revised Australian Qualifications Framework (AQF) and legislative requirements which treat like providers alike.

We could imagine the tertiary ecosystem not as a stratified, hierarchical one, but as flipped on its side, with different types of providers each aiming to be best of their type: best in class.

This ecosystem must be supported by public funds: experience shows that private markets alone will fail to deliver the education and training outcomes we seek as a whole.

But the criteria on which public funds and income-contingent loans are granted need to be explicit, and those principles then applied equally to fit and proper public and private providers offering similar programs at similar levels of quality.

The ecosystem for sharing knowledge and imparting skills needs to be shaped by the four principles of advancing innovation, fairness, efficiency and civil society.

10 recommendations

We make 10 broad recommendations, to be implemented in stages, based on the premise that no one really knows what the future holds, and therefore the conditions must be created for institutional innovation, to maximise our prospects.

The most important of these is that a national tertiary education and training system should be introduced progressively through negotiation between the Australian Government, states and territories on the basis that the Australian Government takes primary responsibility for a single tertiary education funding framework for all levels of the AQF (recommendation 1). This may be the hardest to achieve, but it is fundamental to the other proposals we make and to long-term success.

At the centre of an Australian Government funded tertiary system should be the AQF revised so that it does not rest implicitly on a division between higher education and VET (recommendation 2). The AQF needs some refreshing but is capable of becoming the central yardstick for the funding of qualification levels and types. There is scope, in particular, for it to better recognise learning by doing, workplace learning, and mastery of technique at the highest levels.

The demand-driven system of domestic undergraduate education should be restored, and expanded over time to other qualifications in the AQF (recommendation 3).

In principle, domestic students should have access to income-contingent loans for all levels of the AQF, whether they are studying at a public or private provider. In implementing this extension over time, a clear set of criteria should be crafted as to when public support is to be available and for what purposes.

The Commonwealth Grant Scheme for universities at present is distributed according to student numbers, but the money is also used for research and other purposes.

To encourage greater diversity of mission within what currently constitutes the higher education sector, funding should be separately streamed for teaching, research and any other purposes for which it is intended (recommendation 4). Institutions that qualify for and wish to undertake publicly funded research would do so separately from the number and type of students they teach.

This is also an essential pre-condition for non-university providers, both public and private, to be brought within a unified set of funding arrangements for tertiary education. In all likelihood, most non-university providers will not wish to undertake fundamental or major research projects, and will thus only come within the funding arrangements for their teaching.

There should be less politics in the pricing of tertiary education. Large and frequent changes in funding settings are damaging to tertiary education provision. An independent tertiary education pricing authority should be established to determine the appropriate price for the teaching of various disciplines at different tertiary education levels, and set the maximum amount of student contributions that can be levied (recommendation 5).

A unified tertiary loans scheme should in time be available across the full range of tertiary qualifications within the AQF, with annual and lifetime borrowing amounts set

having regard to the expected private benefits of the various qualifications (recommendation 6).

At the same time, regulation in what is currently called the VET sector needs to be tightened, so that registered training organisations are all of high quality and committed to the mission of education and training (recommendation 7). The Australian Skills Quality Authority (ASQA) needs to continue its work to remove providers which do not meet these tests.

Teaching excellence needs to be valued. There should be a companion to the current research assessment exercise: a teaching excellence framework (recommendation 8). A component of funding should flow in part according to a provider's performance under the framework, to recognise the additional costs associated with teaching excellence and to provide an incentive for excellence.

Further improvement is needed to the information available to tertiary markets about the performance of individual institutions, to assist students in making the right choice for them (recommendation 9).

Once implemented these nine recommendations would stimulate provision at all levels of tertiary education and training, and enable innovation, particularly in courses focused on practice and the workplace.

But there is one more regulatory regime which we think inhibits diversity in the sector: the higher education provider category standards. These lay down the conditions under which an institution is qualified to be a university, and central to this is the requirement to conduct a minimum level of research.

We argue that the word university should continue to be protected in terms of the name, but that provider categories should be abolished (recommendation 10).

Future state

Technical, complex and intermingled though these reform recommendations are, they accelerate Australia's progress on a journey set in train in 2008 by the Bradley Review of Higher Education. They do not involve governments trying to pick winners. They free up the ecosystem of teaching providers and research-active institutions to shape their own mission and be funded for it on the basis of parity with other providers which adopt the same mission and which achieve the same level of quality.

There is a cost involved. We estimate that if all of the report's recommendations had been implemented in 2016, the additional cost of Australia's tertiary education system in that year would have been \$1 billion to \$2.4 billion, a range which depends on assumptions referred to later. This is a small price to pay for investment in a re-invigorated and coherent system which encourages innovation. The price tag for being wrong-footed by economic change would be a lot higher.

The system we propose entails a minimalist structure, but one which is sufficient for institutions to plan their own destiny, protect taxpayer investment and maximise our potential for a future which is different

Summary of recommendations



Subject matter

A national tertiary education and training system

Recommendation

A national tertiary education and training system should be introduced progressively through negotiation between the Australian Government, states and territories on the basis that the Australian Government takes primary responsibility for a single tertiary education funding framework for qualifications from Certificate level (AQF level 1) through to PhD (AQF level 10).



Subject matter

Greater funding transparency and accountability

Recommendation

The Australian Government should ensure that the purposes for which grants are made to providers of tertiary education and student contributions are levied are clearly identified, particularly in relation to teaching and research. There should be clear accountability for the outcomes under each funding stream.



Subject matter

A tertiary education system with the Australian Qualifications Framework at its centre

Recommendation

Australia's tertiary education system should be structured, funded and regulated around a refreshed Australian Qualifications Framework, and not around a division between 'higher education' and 'vocational education and training'.



Subject matter

A unified funding framework

Recommendation

The Australian Government should restore the demand-driven funding model for higher education and extend it progressively to other tertiary qualifications.



Subject matter

Independent tertiary education pricing authority

Recommendation

The Australian Government should establish an independent tertiary education pricing authority. Working within overarching financial parameters set by the government, the authority would:

- determine the appropriate price for the teaching of various disciplines at different tertiary qualification levels; and
- set the maximum amount of that price to be paid through student contributions, having regard to the expected private benefit at different tertiary qualification levels.



A unified tertiary education loan scheme

* Recommendation

Students should have access to a single income-contingent loan scheme that allows them to borrow in respect of student contributions across the full range of tertiary qualifications.



Regulatory arrangements

+ Recommendation

The Australian Government should tighten regulation in the VET sector, ensuring that regulation is responsive to the circumstances of tertiary providers, and integrate the regulatory activities of ASQA and TEQSA over time.



Valuing teaching excellence

+ Recommendation

The Australian Government should develop an instrument to appraise and recognise excellence in teaching, as a companion to the Excellence in Research for Australia instrument that recognises excellence in research. A component of funding allocated to providers to support teaching should be contingent on teaching outcomes.



Improving information on tertiary education outcomes

Recommendation

The Australian Government should improve information available to support the operation of the tertiary education 'marketplace' and assist students to make good educational choices.



Removing higher education provider categories

Recommendation

The use of the term university should continue to be restricted by law but not be based on a TEQSA classification of different types of higher education providers. Universities should no longer be compelled to undertake research that leads to the creation of new knowledge and original creative endeavour in at least three broad fields of study.

Part one A time for imagination

Reaching for the stars with trained minds and skilled hands

It is 28 October 1968 on a hot day in a large Canberra paddock. Prime Minister John Gorton, Leader of the Opposition Gough Whitlam, and a group of senior ministers and officials are gathered. Strikingly, it is a bipartisan occasion, with the Prime Minister joking in his speech that he hopes Mr Whitlam does not take offence at his reference to the idea of a liberal education. What has led to this gathering? It is the unveiling of the foundation stone for what was to be Australia's first College of Advanced Education (CAE).

In his remarks, Mr Gorton stressed the personal satisfaction he took from the task because it symbolised the beginning of new things for the nation.

"We must develop these colleges in a way which will give us plenty of flexibility; adapt the system to the changes now bearing down upon us—changes in the environment, in social attitudes, in the application of science and technology... changes which have a greater intensity about them now than we have experienced at any past time in the history of this country.

If we are to reach for the stars, then we must reach for them with trained minds and skilled hands." Within about two decades from that day in Canberra, however, the higher education system moved from a sector of 19 universities and (by then) 70 colleges, to a supposedly unified national system with about 38 universities only, occasioned in a short period by a series of amalgamations, mergers and straightforward conversion from college to university.

And now, 50 years after the first CAE was announced, we hear calls for more diversity and adaptability in the system, not least by the vice-chancellor of one of Australia's leading universities, Professor Glyn Davis, in a recent essay on the Australian idea of the university.

Despite all the successes of our system, which are acknowledged in this report, there is a sense that flexibility has been lost and that we are not in fact ready for the next wave of changes bearing down upon us, to use John Gorton's words.

The most striking thing in the discussions we conducted for this project with 52 people experienced in the world of tertiary education was how many imaginative and ambitious ideas there are, locked up and waiting to escape, but battling against a seemingly equal and opposite force of fatalism; a resignation that our

structures are too rigid and our federal system with its adversarial political culture too strong for real change to have a chance.

With a confusing range of new technologies now bearing down upon us, huge shifts in the global order under way, longer lives – and potentially longer working lives – it is vital that Australia has a flexible, adaptable tertiary education and training system which gives us the best chance of thriving. This paper is primarily about how we might best achieve that.

The hit musical *Hamilton* has revived the 17th century English phrase "a world turned upside down". Whether one likes or dislikes the fashionable word 'disruption', we must be ready for an upending of our world.

The ideas that follow are offered in a constructive spirit, praising and safeguarding what works, but urging action over what doesn't.

We are proposing a practical set of recommendations and suggestions. We recognise some cannot be implemented immediately and others will require trade-offs and co-operation. Pursued in the right spirit, no institution needs to be a loser in terms of its status or future

development. Not pursued at all, we all risk being on the losing end, as the weaknesses of current arrangements become increasingly manifest.

There may be a certain idealism in what follows, but as a nation we do still need to reach for the stars with trained minds and skilled hands. The blend of practicality and idealism amounts, we think, to imagination: and Australia's tertiary system needs to be reimagined.

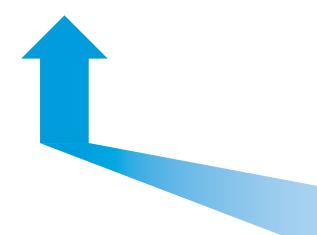
A veil of ignorance

Designing a tertiary system for a world turned upside down by technology is 'a wicked problem'; an expression sometimes used for the most complex of challenges, where "wicked" derives from the Anglo-Saxon word twist (as in wick) rather than evil. Huge change is coming, driven largely by technology but underpinned by a global rebalancing of power and wealth between East and West.

Much of the debate is about automation and AI, where huge advances are being made. The Turing Test has been passed. This was the standard set in 1950 by Alan Turing, which requires a human to be unaware that they are actually dealing with a machine. Google, amongst others, have demonstrated this, albeit in context-specific settings.

Optimists say that automation will generate a net increase in jobs, as all previous technological revolutions have ultimately seemed to do. Pessimists say that this might be the first such revolution where that is not so. In the middle are those who point out that the new jobs may be in other countries, which is cold comfort for some.

But it isn't only about automation and Al. Numerous other technologies in biomedical science, big data and blockchain are on the horizon.



What might be unique about the socalled Fourth Industrial Revolution is that never before have so many new technologies arrived at the same time and intermingled.

We know we need to be ready, but there is little consensus on where to start. Too little action and we may find ourselves struggling to catch-up. Too much action of the wrong kind may leave us little better off.

To lock ourselves too firmly into one model or one principle is highly dangerous. We don't know whether the bachelor degree will remain the centre of gravity of higher education. We don't know how far non-award, micro-credentials will take hold: if employers recognise them and students want them, the market will provide them. We don't know whether the future really is about more skills and less disciplinary knowledge. Nor do we know which skills, or whether we have academic and training workforces able to pass them on.

Get it right and Australia can thrive competitively, enjoy good standards of living, and have a fair and civilised society. Get it wrong, and the opposite will be true.

The thought-experiment of philosopher John Rawls offers an approach we might take.

Rawls asked what kind of society people would design if they knew nothing about their particular talents, abilities, tastes, social class and general position in the social order. In other words, what would they prescribe if they were behind the veil of ignorance?

When this is tested, people want to hedge their bets. They provide for opportunity to thrive, but also have a safety net in case they are among the unlucky ones.

We could benefit from adopting a hypothetical veil of ignorance about what the future will require of tertiary education, and design a system which maximises our chances of success whilst embedding protections.

Having said this, we are not ignorant about the past.

We know that market forces on their own do not deliver all the educational outcomes that we want.

Left to its own devices, education would disappear from thinly populated areas, fields that require capital investment with long payback times would be neglected, the already privileged would be further privileged, and knowledge that is part of past civilisations and cultures would be lost, to the impoverishment of humankind.

There are also signs that simulated markets, where participants compete for public funds, may be ineffective, if the idea is to spur the fittest to thrive. KPMG's analysis of the relative percentages of public money going to universities is that if one pools together the Commonwealth Grant Scheme, Research Block Grant and competitive grants, there has been barely a shift in any institution's overall share in recent years. This may mean that great effort is going into marketing for students, preparing grant applications and recruiting each other's talent, to no discernible relative advantage for any single participant in terms of share of the total pool.

By the same token, we know that central planning and distribution alone does not work. It is expensive, backs losers as much as winners, is prone to political influence and is too removed from ground level to be responsive to accelerating change.

We need to find somewhere in between or somewhere different.

Possibly we are moving into a 'post-market' era of education where:

- the pursuit of profit is quite legitimate if mixed with the pursuit of a genuine educational mission;
- regulation is used to promote innovation and not only protection; and
- government control is proportionate to risk, the gravity of consequences and the potential gains from experimentation.

We need, in short, a system that is promptly responsive to changing circumstances, but which can't be gamed just for more public or private money.

In this post-market phase, a reasonably balanced system architecture must be allowed to settle into place, and if it is to promote innovation, albeit under certain groundrules, there must be some acceptance of risk.

To what end?

In this report we provide a brief analysis of the current state of tertiary education, and then imagine a future state which, to the extent we can behind a veil of ignorance about the changes that are coming our way, has the settings for success.

To be explicit, however, there is a vision at work.

It is of a tertiary education or training system where participation is near-universal, and lifelong. As a society, we have moved from a long phase of elite higher education, through a transitional period of mass opportunity and towards a future where virtually everyone must spend time in at least one of the different forms of participation.

Completing school was possibly no longer enough even in John Gorton's imagination of 1968, but it is certainly no longer enough in 2018. As TAFE Directors Australia have said in their Submission to the Senate Standing Committee on Education and Employment (May 2018):

"Completing secondary schooling, whilst still valuable in itself, is no longer enough in a global and interconnected economy ... More than ever, with continuing rates of high youth unemployment and unacceptably high rates of homelessness, skills acquisition, including basic education, is fundamental to success, irrespective of background."

In our vision, a tertiary system is made up of levels and types of education and training but no longer segregated into 'higher' and 'VET'.

It is a national system which ensures that Australia contributes to and thrives in the coming technological revolutions.

It is a vibrant contributor to the global tertiary education sector, earning vital income for the nation and building up goodwill for Australia around the world.

And it is a system that rests on principles, about the appropriate uses of public money and the ends to which it should be put: the advancement of innovation, fairness, efficiency and civil society.

Part two The current state: a binary system

Recent monographs by Glyn Davis, Peter Coaldrake and Lawrence Stedman, Stuart Macintyre, Andre Brett and Gwilym Croucher, William Lacy and others have analysed in some detail how today's system acquired its current shape. Our analysis suggests it has been a mixture of design, accident and unintended consequence.

Importantly, it is a shape that is surprisingly recent, and in many respects only three decades old. Whilst it is true that universities have found themselves with a path dependent legacy from England and Scotland which goes back much longer, there are features which are unique to Australia and not embedded in ancient tradition. This is important: it reinforces confidence that something which was changed comparatively recently can be changed again.

In brief, the John Dawkins reforms brought numerous non-universities into a unified national system in 1988-92, most of which, but not all, were regarded as higher education institutes at the time. Almost overnight, the acquisition of the university tag seemed to trigger the pursuit of esteem and recognition associated with belonging to the university world.

Those institutions not brought into the system coalesced into what we now call the VET sector, which acquired a more distinct identity shortly afterwards through the adoption of competency-based assessment which is guite different from the curriculumbased approach of the university

John Dawkins did not intend uniformity in higher education, he intended unification. No one seemed to intend such a clear binary distinction between higher and VET, with its major fault line drawn through different Australian and state and territory funding approaches.

Blurring the effects of this was the stroke of genius which opened up Australia's tertiary sector to feepaying international students, at around the same time, which has had huge economic, social and cultural advantages, and which must not be compromised.

But underneath, Australia lost many of its stand-alone institutes dedicated, for example, to:

- Music
- Arts
- Mines
- Teaching
- Nursing
- Technology

They became part of the university ethos or the VET ethos, mostly the former, and mostly with the backing of professional groups, seeking higher levels of entry and prestige.

The good...

Our 30-year-old arrangements have been highly successful in many ways, and it is important to celebrate that.

Higher education, in particular, has become bigger than many people appreciate. It is no longer at the edges of society, when perhaps 10% of the population went to universities and entry into many professions was not exclusively through a degree.

Now, about 40% of young Australians go to university, assisted by the brilliant policy design of HECS-HELP, more women than men (a reversal in enrolments, but not, as it turns out, in lifetime earnings), and graduate-entry to the professions is almost a given.

There are about 1.4 million enrolled students, of whom 28% are from overseas, attending about 170 higher education providers, including 43 universities.

The combined revenues of higher education providers are about \$35 billion, and the figure is still growing although possibly slowing.

They are seemingly profitable. About 80% of higher education providers recorded a profit or surplus in 2016, according to an analysis by TESQA. The median university reportable surplus margin in 2016 was 5.5%

(up from 4.6%), although there were wide differentials and some universities seem to be close to the line financially.

Universities are very significant for the economy. Deloitte has estimated that Australia's GDP is 8.5% higher because of its graduate workforce (which is 28% of the total workforce). Cadence Economics found that for every 1000 university graduates entering the workforce 120 new jobs are created for people without a degree. In 2014-15, the total spillover effect created 25,000 new jobs for people without a degree.

In fact, without universities producing graduates, the growth rate in employment for those without a degree might have been zero in the previous eight years. Universities have arguably been the engine of growth in the whole employment market.

Assessing the contribution of the VET sector to the economy is harder. About 30% of young people who do not go to university attain a Certificate III or higher qualification in the VET sector. Many more use it to acquire skills throughout their lives at one of about 4,500 accredited providers. The VET sector generated over \$4.8 billion in export income in 2016-17, just under one fifth of total export income from international education.

KPMG's work for the Victorian TAFE Association has shown that TAFE Institutes and divisions of dual sector universities contribute \$2.9 billion to the State's economy annually, and add significantly to employment prospects. For every dollar spent by Victorian TAFEs and dual sector institutions, \$2.19 was added to the local economy. We know of no reason to suppose this would be different elsewhere.

Furthermore, we know that 40% of students in Victorian TAFEs and VET divisions of universities are from low socio-economic backgrounds, compared with just 14% in the state's universities. The heavy lifting is happening in public VET institutions.

International education generates over \$30 billion for the national economy each year, with higher education the largest component of this but VET a significant contributor. International education is Australia's third largest export, the largest services export, and in Victoria the largest export of any kind.

A degree is obviously significant for individual graduates and their families. We are not sure whether the lifetime earnings premium from a degree is reducing, following the expansion of graduate numbers, but the current evidence, perhaps counter-intuitively, is that it is holding up. Whatever the true situation with the earnings premium, there is undoubtedly an employment premium; a graduate is more likely to be in work than a nongraduate.

Over half of Australia's universities are in one or more of the main sets of international rankings.

These rankings pick up research outputs and quality to differing extents, and it is no surprise that the research of Australian universities is amongst the best in the world.

According to the periodic exercise called Excellence in Research for Australia (ERA), the amount of research which is at or above 'world standard' continues to rise.

The mixed...

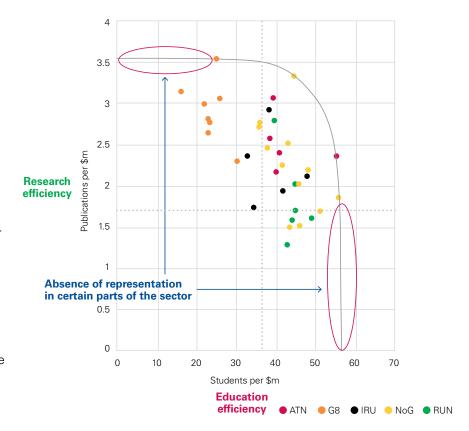
In other respects the past 30 years have produced mixed results.

We see the paradox of sameness amongst universities, despite ostensible differences. Most but not all of the people we spoke to believe it to be the case and lamented it.

One regional vice-chancellor told the visiting American sociologist Bill Lacy and his co-researchers: "Australia has too many universities for its population. It has too many campuses. It has too much duplication and too many trying to do the same thing."

This is illustrated by the efficiency analysis of Keith Houghton with Mark Clisby and others who have undertaken an econometric-based empirical analysis of changes over time in the total dollars spent on research divided by the number of publications produced ('research efficiency') and dollars spent on teaching divided by the number of graduates ('education efficiency'). If the incentive system encouraged institutions to play to their comparative advantage, one would expect some institutions to be highly efficient in research, others to be highly efficient in education and institutions in the middle where a hybrid approach is most efficient for them. In fact, however, as the graph adjacent shows, in 2016 there were no institutions in the research efficiency corner of the efficiency frontier for that year, and none in the education efficiency corner. The colour coding does show the Group of Eight "research intensive" universities clustering towards the research efficiency corner (the orange dots), but none actually at it. The Innovative Research Universities, however, are not particularly aligned with research efficiency (the black dots), and basically the pattern of all non-Group of Eight institutions is an assortment. With one exception, the regional universities have mixed, mostly education-focused, results.

The Efficiency Expenditure Frontier 2016



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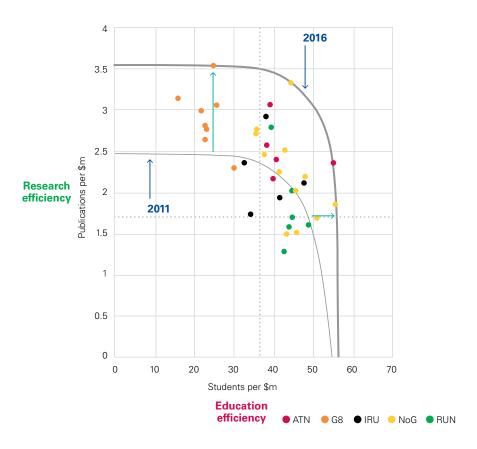
In what has been described as "mimetic drift", there is the view that public institutions are tending to aspire to be the same thing, reinforced by the drive for improved rankings, branding, the current privileging of research over teaching and probably the lustre of the big cities. This underpins aspects of our recommendations. In short, we think the mental topography of the system should be flipped on its side, with encouragement of more diverse missions and rewards for being the best at one's mission; for being best in class.

In relation to teaching, not only is tuition income currently used to cross-subsidise research, there is no direct financial reward to universities that teach well. This compares with Research Block Grants which reward success in winning research grants (a proxy for quality). The system

effectively rewards universities with high entrance requirements, low attrition rates and good graduate employment outcomes, but this can operate to cement the privileges of established elite institutions with few students from low socio-economic backgrounds. In contrast, if 'learning gain' was rewarded, in effect the value added to a student, this could operate as an incentive to work hard to turn around the lives of students from disadvantaged backgrounds rather than smooth the passage of those already well-set in life.

The current incentive system may help to explain an apparent paradox that during the period when demand-driven funding for domestic undergraduate education was introduced, to stimulate market-like competition for students, research efficiency improved whilst education efficiency barely moved.

Total University Expenditure Efficiency Frontiers 2011 and 2016



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The graph adjacent contrasts the efficiency frontiers of 2011 and 2016, showing a gap in the research frontiers but almost none in the education frontiers for those years. While there are several possible explanations for this striking outcome – a compelling one is the cross-subsidy from education revenue to expenditure on research.

A further mixed outcome of our current system is the restricted availability and range of choice in remote and regional areas. Australia's regional institutions have done an amazing job, but many are in areas where international students have not been attracted. Without that extra fee revenue, life is relatively tougher. Some will struggle from

the cumulative effects of demanddriven funding, as regional students are drawn into the cities for the choice they provide.

Participation in tertiary education by low income and disadvantaged groups has certainly improved, but it is a matter of judgement whether the amount of increase is commensurate with the funding put in. There is only so much an education system can do, it seems, to overcome stubborn barriers of class and culture.

Languages and minority disciplines have survived, but contracted. Many universities have exited from some or all of the languages they previously taught, due partly to declining demand from young people but partly also due to funding constraints.

The ugly

There have undoubtedly been failures.

On anyone's terms, as described by the Productivity Commission and others, the VET FEE-HELP loans scheme, was a significant drain on public money: as Professor Valerie Braithwaite describes it, a scandal that cost taxpayers an estimated \$1.2 billion in inappropriately issued loans. Much of it was wasted on unscrupulous providers who were not genuinely committed to the education and training of their students. The fallout for the VET sector's reputation and the wellbeing of genuine providers has been serious, and the consequences for a cohort of students let down have been very damaging.

ASQA has worked hard to weed out low quality and non-genuine providers, but there is still some way to go, due in part to the large volume of registered training organisations. The task of ensuring VET is of a quality that can provide people with both an employment and an earnings premium is broader still. It requires a reversal in the trend of declining government support. It will require a concerted effort to ensure students acquire current skills and a skill base that provides a platform for future skill development.

The income-contingent loan scheme for higher education, HECS-HELP, whilst brilliant in design, was always vulnerable to changes in levels of contribution and contemporary views about the relative worth of disciplines. The upshot, not intended at the outset, is a generation of university graduates with significant levels of debt not always calibrated to the employment prospects for their field.

And despite all the investment to date, social inequality has not reduced in recent years. In some respects it has increased. The recent report 'How Unequal? Insights on Inequality' by the Committee for the Economic Development of Australia (CEDA) has demonstrated this clearly. We confront the paradox that tertiary education has expanded, but so too has inequality. The drivers of inequality are various and complex, but if 40% of the population go to university and enjoy an earnings premium and 60% don't, then over time the gap will widen between the two groups. If it is the same kind of families which go to university over the years, then increasingly a young person's prospects in life will be determined by the circumstances of their birth. This is not the equality of opportunity which had been hoped for by the advocates of higher education expansion; it is social immobility.

The conclusion we draw is that universal participation in tertiary education and training is not a panacea, but it certainly can help. This underpins our recommendations later that a unified tertiary system should potentially provide comparable public support at all levels of qualification, and on a national basis.

Finally, a conspicuous problem has been the 'polytechnic-sized hole'; a hole filled in some other countries by technology institutes devoted to practical learning and technique at the highest level. Our Australian system would not recognise these as institutes of higher education and the current AQF would struggle to adequately classify their courses.

Beyond tweaking

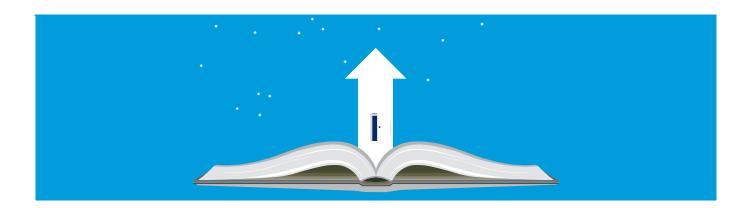
Whatever one's assessment, what matters now is to be as ready as we can for the future.

There are some good signs. From our interviews and our own observations we know there is innovation and experimentation amongst public and private providers, and educational services companies, which are starting to challenge traditional models; whether it is new uses of technology in learning, new ways of curating content, new mixes of learning modules or better support for academic methods. There is a need to nurture this innovation, as we seek to do in our recommendations.

There is also a need for what is really structural change. As one well-placed industry observer put to us, the system is "beyond tweaking, beyond tinkering".

We need a new mindset. Neither public nor private should automatically be seen as good or bad. There is a respectable argument that most of the innovation at the moment is coming from the private sector, but that might only be a perception, as might the view that most of the bad behaviour originates there too.

Part three The future state: an ecosystem



In some respects our future state is a development of ideas at the conclusion of the landmark Bradley Review of Higher Education in 2008; in particular the following passages:

"The panel considers that the case is stronger than ever for primary responsibility for regulation and funding of tertiary education to be located at the national level. In a globalised world, higher education and skills development are central to national productivity growth, which is the key to our economic future. Major employers and providers of education and training operate across state and territory boundaries. No longer are education and skills 'state-specific' or 'state-centred'. In an integrated national economy, education and skills are required to be nationally consistent and certified.

It appears too, that some states and territories face major fiscal constraints, which may lead them to reduce their investment in VET in the near future, leading to skewed and uneven investment between the sectors over time if a demand-based funding model is adopted for higher education.

For these reasons, the panel considers that it is now time for the Australian government to take primary responsibility for the broad tertiary education and training system in Australia. What is needed is not two sectors configured as at present, but a continuum of tertiary skills provision primarily funded by a single level of government and nationally regulated, which delivers skills development in ways that are efficient, fit for purpose and meet the needs of individuals and the economy." [Emphasis added]

If we are more forthright than the Bradley panel, it is likely due to the experience of the last decade, and how that has informed our views.

The Bradley Review was seen as putting Australia on the pathway towards an 'integrated' tertiary system. In relation to integration however, nothing fundamental has changed.

The classical idea of the Rule of Law in a liberal society was that each should be allowed to pursue their own ends, irrespective of class or other distinguisher, but subject to some objective rules that have been properly created and made public.

Applying this here, tertiary education providers should be free to do the same, without the constraints of 'provider categories', but subject to some principles and incentives designed to nudge the ecosystem in directions which maximise our chances of being ready for change.

Whereas the creation of CAEs from 1967 was an attempt to create a provider type to meet the challenges of change, we would argue that any rigid list of forms or types of institution would collapse under the furore surrounding its proposal now.

Instead, a preferred approach is to build on the AQF and the existing national standards and protections, particularly for international students, to supplement normal consumer protection laws, combined with greater transparency and accountability.

If a qualification exists in the AQF then it should potentially be eligible for some national public funding, by way of subsidy or income-contingent loan. If a course or program is not within the AQF then it should not be eligible for public funding, but if a provider wishes to issue a credential which the world at large will recognise and which meets consumer protection requirements then, as now, this should be allowed to flourish.

The tertiary sector should no longer be divided, regulated and funded differentially across a binary divide, but against levels and types of qualification in the AQF.

Institutions would be accredited (or in some cases be self-accrediting) for particular kinds of qualification, and the misleading labels of higher and vocational abandoned.

There are reasons to protect certain terms, particularly the word university, but there is no need to link name to entitlement. If the entitlement to offer exists, it should not stem from a name.

Whether an institution is accredited (or self-accrediting) to teach at some or all levels of the AQF is a guite separate issue from its name. Similarly if an institution is to receive public money to carry out research, that should be on the basis of its capacity to do research at a level of quality and scale; and neither linked to name nor coursework offering.

It is, however, important that institutions retain a clear sense of the mission they have chosen. Within reason, the State should be agnostic as to the mission, and the system should look for ways of rewarding excellence of different kinds.

Returning to the ideas in the previous Part, rather than a hierarchy of similarity, we need to flip the system on its side, allow distinctive missions to emerge according to providers' judgements as to where the needs are, and reward the best in class.

A revised AQF might allow less weight to be placed on theoretical frameworks at higher level qualifications and permit more weight on practical mastery of technique. A provider might seek accreditation for programs of a new kind, and be successful if there is a demand and they are good at it.

In effect, the rewards should not be just for those who succeed in reaching the top rungs of a single ladder, but for those at the top of different kinds of ladders.

In the recommendations in Part Four, we go into some detail about Government funding responsibility, the AQF, eligibility for loans, rewarding excellence and abolishing provider categories.

To illustrate the idea at this stage, however, if an institution feels that it can no longer efficiently be excellent at research, or not in the currently required minimum number of fields. it should be able to concentrate on teaching qualifications in the AQF for which it is eligible. This isn't to create a category of "teaching-only university", it is to enable choice at the time according to need and capacity.

But the prestige that comes with research and world rankings is a powerful force. For this reason, we think there should be a teaching excellence framework, which carries public recognition and funding, to enable providers to build reputations for the quality and type of education they provide.

This is not, however, a private market. There are important reasons why public funding is essential, whether or not the provider is regarded as 'public'.

Rarely, however, do we see criteria expressed to justify when public money should be available and when it should not.

Given that we recommend the Australian Government take responsibility for the funding of tertiary education, it is timely to state some criteria.

In our view, the tertiary education system generally warrants public money and regulation because:

- the market on its own would fail to deliver the outcomes that we seek;
- the economic interests of citizens are at stake;
- the international reputation of Australia is at risk;
- the information asymmetry between provider and student is such that the latter cannot reasonably be expected to discover what they need to know on their own;
- the opportunities available in remote and rural communities are not reasonably comparable to those available in the cities.

The first criterion above begs the question: what outcomes should we seek?

Most reform proposals rest on some stated principles. The Bradley Review, for example, referred to a higher education system which makes essential contributions to:

- a just, civil and sustainable society;
- assisting Australia to function effectively in the community of nations;
- building the national economy.

We accept that a tertiary education system seeks to build a strong economy and a civilised society by sharing knowledge among citizens and promoting skill acquisition. We think the formulation that best underpins our recommendations to promote the type of system which would currently best achieve this are the principles of:

- Supporting innovation;
- Improving fairness;
- Promoting efficiency;
- Advancing civil society.

Supporting innovation

Arguably Australia will stand or fall in the future on how innovative it is, in the face of technological and other change.

Doing new things and finding new ways of understanding or doing existing things is what will best ensure our future, buttressed by excellent science and the humanities. Innovation in tertiary education itself is therefore vital. Entrepreneurial spirits, inside and outside public institutions, need to make their own judgements about where success lies and be given more scope to experiment.

This is in line with Nobel Prize-winning economist Joseph Stiglitz's idea of a Learning Society, and the education systems that promote it.

A freed up tertiary system and AQF could lead to the revival of learning by doing and twin track modes of qualifying for the professions. Can we confidently say that graduate-only entry into Law, for example, has improved things following the removal of an alternative track of articles of clerkship plus examinations?

The apprentice model has arguably been stultified through regulation and credentialism in the search for barriers to entry and ways to enhance or retain prestige.

Improving fairness

The fairness we refer to here operates at various levels.

One boils down to competitive neutrality. By virtue of being listed as a Table A higher education provider in the Higher Education Support Act 2003, for example, numerous entitlements and benefits can be accessed that are not available to other providers. A freed up tertiary system with strong regulation to monitor quality would enable a level playing field between new entrants and established entrants, and between public and private providers.

Fairness also applies at the level of funding and loan schemes. The differences that currently exist are not justified, and we recommend a single unified funding framework in Part Four. We value 'like funding for like offering', and enabling people to chose the education and training options they believe are most appropriate to their circumstances.

Of course, fairness also operates at the social level. If unintentionally, the education system is actually driving social inequality, there are good arguments that we need to reduce further the barriers that exist for disadvantaged people seeking to access courses which have the highest graduate premium. We make a start on this, particularly in our recommendation for a unified funding system at all levels of the AQF.

Promoting efficiency

The work of Professor Keith Houghton and Mark Clisby, referrred to above, indicates great disparity between institutions in the cost of graduating a student or producing a refereed publication. Many factors are at work and one is likely to be the inhibitions that currently exist in playing to one's strengths.

Some institutions are not well-placed to produce economically the volume of publications they are producing, and resources would be better used on students and scholarship. Others are teaching large volumes of students, for the purpose of generating revenues to apply to research, and are potentially not giving that teaching the full commitment it deserves.

This generates inefficiency and distortions at institutional and system level. If we remove the provider categories and fund research separately at appropriate levels, we help institutions find a better balance for their circumstances and mission.

Advancing civil society

Not surprisingly much debate about tertiary education focuses on outputs, job-readiness and the future world of work. These are necesary components of a functioning civil society, but they are not sufficient. A good civil society should actively conserve the civilisations of the world for the benefit of generations to come: it is "civilised".

Education systems capture the ideas, events and perspectives of the past, preserving them for and transmitting them to future generations, to learn from and reflect upon.

The market would fail if we left these goals to it entirely, and we would lose our strengths, for example, in fields such as history, languages, classics and ideas.

We may or may not have time on our hands in the future, depending on the automation of human labour and how the fruits are shared, but we do not want to experience an era in which we are devoid of the ability to examine our past, our world, our universe, and our identities.

We enjoy going to see physical ruins of previous civilisations, but if we create intellectual ruins, there is nothing to see. Once gone, they are gone.

There are significant reasons to do with civilisation, civics and citizenry to support public funding for education and training which may not be purely instrumental but do have important social purpose.

In Part Four we put these principles into effect with recommendations and other suggestions about how the tertiary system could be reshaped as an ecosystem to make us ready for the future.

Part four

Below are 10 recommendations which if implemented would begin to realise our vision of a unified tertiary sector, no longer divided into higher education and VET sectors, and based on principles supporting innovation, fairness, efficiency and civil society. Some thought has gone into the sequencing, and the first two are logically prior, but thereafter they should be read as a whole. Each comes with its own narrative, enabling it to be read on its own, but all draw on the prior material.



** Recommendation 1:

A national tertiary education and training system

A national tertiary education and training system should be introduced progressively through negotiation between the Australian Government, states and territories on the basis that the Australian Government takes primary responsibility for a single tertiary education funding framework for qualifications from Certificate level (AQF level 1) through to PhD (AQF level 10).

This may be the most difficult of the reform recommendations to achieve, but it is the most fundamental. In no real sense can we say that Australia today has a national tertiary education and training system which is designed and funded in an integrated and consistent way across all levels of the AQF. The current funding arrangements, in particular, are a significant barrier to the overall performance of Australian tertiary education. The detail and staged implementation of a new national system must be a matter for negotiation between governments but unless there is a commitment now towards that end Australia risks being unready for the tertiary education and training requirements that a

fast-changing economy and world of work will require, and becoming less competitive in international student markets. In addition, some parts of Australia will continue to be underserviced by tertiary education across sufficient fields of education and AQF levels. The national interest now favours a model which treats both tiers of post-secondary education equitably.

Proposals for the Commonwealth to take responsibility for VET funding date back to at least 1991 and 1992 when the Hawke and Keating governments offered to assume full responsibility for funding (with the states and territories retaining operational responsibility). In 1996, the Commonwealth National Commission of Audit recommended that VET become a Commonwealth

responsibility. The Bradley Review in 2008 argued along similar lines, calling for a more coherent and nationally regulated and funded system covering higher education and VET. From time to time one or more states have supported the idea. This, we argue, is now a nettle that must be grasped.

Australia's current tertiary education funding system is highly fragmented. For domestic higher education qualifications, the Australian Government overwhelmingly funds the system through grants for teaching and research. It also administers a number of income contingent loan schemes to facilitate contributions by students at universities and other eligible higher education providers. States and territories occasionally make capital grants to providers for specific needs, however their contribution to the operating revenues of higher education providers is very limited, and is often less than a recipient university pays to the State or Territory in payroll tax. Australian higher education has enjoyed a long period of growth under a relatively stable funding architecture.

For VET qualifications, however, funding responsibility is split between two levels of government. States and territories fund the delivery of a range of VET qualifications by TAFE institutes and other providers. In recent years, funding has become far more contestable between public and private registered training providers, though arrangements vary from state to state. The Australian Government has made a financial contribution to VET through national agreements with the states and territories, including through the National Agreement on Skills and Workforce Development, the now-lapsed National Partnership Agreement on Skills Reform and through the incompletely implemented Skilling Australians Fund. It makes other financial interventions occasionally to support specific outcomes, such as the delivery of apprenticeships. The Australian Government runs an income contingent loan scheme (VET Student Loans) for a limited range of VET qualifications, available from TAFEs and eligible private providers.

In this fragmented funding environment, cost shifting occurs between the Australian Government and the States. Increases in funding by the Australian Government are sometimes met by reductions in funding by the states and territories. The Australian Government attempts to control for this through financial agreements with the States, however controls are limited and transparency has been difficult to achieve. Overall, the real level of government funding for the VET sector is in long-term decline.

As a consequence of these confused funding responsibilities, VET funding arrangements have been less stable over time than for higher education. Government subsidies, loan schemes and other funding arrangements have changed frequently as the Australian Government, states and territories each other.

This chronic instability in funding arrangements has made it more difficult for VET providers, both public and private, to plan for the future. VET providers have been much more likely to fail and shut down, with damaging student outcomes. There is also little clarity, recognition or transparency around the obligations of TAFE Institutes in regional and remote communities where education and training infrastructure is critical but no competitive market is viable.

VET students are also at a significant financial disadvantage under the current confused funding arrangements. It is easier for many students to obtain an incomecontingent loan to study a higher education degree than it is to obtain one to study a VET qualification, for which they may be better suited. There are inbuilt biases in favour of higher education in the design of the various income contingent loan schemes.

The following recommendations provide a roadmap for the policy and funding changes that would be required to achieve a single tertiary education funding framework in a staged way, while preserving the key elements of the current system that are working relatively well and realising improvements for those that are not.

What would these proposals cost?

The recommendations in this report have significant implications for the Australian Government as well as State and Territory counterparts.

Under these proposals, the management of costs would largely fall to the Australian Government, aided by an expert independent tertiary education pricing authority. Implementation of change would need to be actively managed to ensure the system remained affordable.

Within the higher education sector, the recommendations are likely to produce a net reduction in expenditure. In a unified funding framework in which loan finance is available equitably for people choosing to undertake a VET qualification, more people will choose to undertake a shorter qualification rather than a bachelor level qualification which on average currently takes in excess of 3.5 years to complete. In our judgement, these cost reductions in current higher

education activity will outweigh the cost of expanding subsidies and loans to students at all higher education providers.

The financing of the VET sector in Australia is opaque and does not enable the current resourcing of student places across the VET sector to be properly understood.

The table below identifies the main expenditure items and revenues that supported VET student places in 2016.

| States and territories – including subsidies to public and private providers | \$2.88 billion |
|---|----------------|
| Australian Government – funding through intergovernmental agreements | \$1.82 billion |
| Australian Government – student loans issued | \$1.47 billion |
| Student fees and charges – public VET providers only (a) | \$0.51 billion |
| 'Fee for service – other' – public VET providers only | \$0.47 billion |
| (includes fees paid by individuals, industries and firms for specific, tendered- for training including any contracting and consulting fees for training purposes) | |

(a) Up to \$172 million of these student fees may have been paid using an Australian Government student loan.

Source: NCVER and Australian Government, Department of Education and Training.

The significant financing issues for the recommendations in this report relate to the VET sector and in particular to the 37% of VET activity (333,600 full time equivalent training places) that did not receive any direct government subsidy in 2016, but for which students may have received a loan.

How this is brought into the framework will be the big driver of the potential costs and these will vary significantly depending on decisions about course and provider quality, financing rates for courses and disciplines, levels of student and employer contributions and the appropriate limits that are placed on student entitlements to subsidies and loans.

Using 2016 data, we estimate that full implementation of the recommendations in 2016 would have cost around \$1.7 billion dollars more in that year than governments actually spent. Annual additional costs would likely fall within a range from \$1 billion to \$2.4 billion.

This compares favourably when viewed against the fact that state and territory governments reduced their expenditure on the VET sector by around \$1.5 billion dollars in nominal terms from 2012 to 2016.

This cost estimate assumes that:

 there would be a more systematic approach to resourcing activity through student contributions, as currently occurs in higher education but at a lower average level in recognition of the generally lower income premium from a VET qualification;

- ASQA and TEQSA would be equipped with sufficient regulatory powers to sanction and remove from the system tertiary providers with demonstrably poor student outcomes; and
- current state and territory expenditure on the VET sector would continue to be available annually in the form of direct subsidies supporting tertiary education.

Funding of the unified tertiary system would need to be subject to negotiations with the states and territories through the Council of Australian Governments (COAG).



+ Recommendation 2:

A tertiary education system with the Australian Qualifications Framework at its centre

Australia's tertiary education system should be structured, funded and regulated around a refreshed Australian Qualifications Framework and not around a division between "higher education" and "vocational education and training".

Initially created in 1995, the Australian Qualifications Framework (AQF) sets national policy for regulated qualifications in Australian education and training. It incorporates the qualifications from higher education and VET into a single comprehensive national qualifications framework, and covers qualifications ranging from Certificate 1 through to PhD. Secondary schooling is also considered a part of the framework but is not assigned a level within it.

Jointly agreed by the Australian, state and territory governments, the AQF is widely used throughout the tertiary education sector by government, regulators, professional bodies and providers. It informs decisions with respect to funding, registration, quality assurance, learning design and work practices. It is also used in workplaces, for example in industrial agreements and occupational licensing, and for other purposes such as immigration and social services.

While not a perfect instrument, the Australian Qualifications Framework is an important national policy which ensures that qualifications are defined consistently throughout Australia and that they are nationally recognised. It supports recognition of the value of Australian qualifications overseas and in so doing it helps protect the international reputation of Australia's tertiary education sector.

The Australian Qualifications
Framework should be the central organising element of a redesigned tertiary education system. Only qualifications that are recognised by the AQF should be eligible for government funding and incomecontingent loans. Tertiary education providers should be accredited to deliver AQF qualifications at designated qualification levels.

The AQF is currently under review. To ensure that the AQF remains fit-for-purpose as a central organising construct for Australian tertiary education, it should be developed to ensure that:

- learners can create their own programs, sometimes with a mix of practical and theoretical learning, to meet their individual needs;
- qualifications can be achieved through various learning pathways, including practical, employer-based, technical and discipline-based;
- as learning technologies and teaching approaches evolve, the AQF enables institutions to recognise learning outcomes aquired outside of the regulated tertiary education environment and place less emphasis on the number of years of formal tertiary study;
- the confusion about overlapping VET and higher education variants of the same qualification type should be removed.

In relation to the latter point, there are four qualification types which are "recognised" and thus accredited both by ASQA and TEQSA for providers to deliver; the diploma (level 5), advanced diploma (level 6), graduate certificate (level 8) and graduate diploma (also level 8). Confusingly, also at level 6 is the associate degree, which is higher education only, and at level 8 is the bachelor honours degree, also only higher education, sitting alongside the graduate certificate and graduate diploma, which can be either VET or higher education. In between is level 7, the bachelor degree, which is higher education only. There are three qualification types at level 9. The result is that 16 qualification types exist. Fifteen are placed in ten levels, but the sixteenth, the senior secondary certificate of education (ie the Year 12 Certificate), is not placed at a level. Out of the 16, four have VET and higher education variants.

To a large extent this complex scheme, which is unlikely to be remembered in full by anyone other than an education expert or regulator, is driven by history, path dependency and the realities of the federal-state division of powers and funding arrangements. Substantial progress will not be made towards a unified tertiary system whilst these differences and apparent anomalies persist. Each qualification type should have a level, there being no magic to a total of 10, and if necessary duplicate qualification types at the same level should be removed. If this requires revisiting the relative weights of theoretical and technical components in a qualification type, this too might be desirable for other reasons.

These changes should facilitate integration of the regulatory activites of ASQA and TEQSA (see recommendation 7 below). They should enable a tertiary education provider to deal with a single regulator. For example, an interim step to the integration of regulators should be enabling ASQA's scope of registration to cover bachelor degrees offered by predominantly VET providers. Similarly, TEQSA should be enabled to cover what are currently VET offerings of universities.

The AQF should be designed to encourage more collaboration between providers of different types, allowing learners to assemble learning experiences of different types - practical, theoretical, employmentbased - and have them contribute towards an appropriate qualification that is recognised and has value to potential employers. The AQF should encourage learners to construct learning journeys more flexibly, recognising also that many learners will move between levels over their lifetime rather than travelling in a single direction. It should also be made simpler for providers and students to embed lower level AQF qualifications within higher level ones; for example a Certificate IV within a degree.

There is insufficient recognition in the current AQF that substantial amounts of learning occur while people are at work, rather than in formal study. There should be pathways to a qualification which enable learning that happens on-the-job or in other non-traditional ways to be formally recognised and reduce the time taken to achieve a qualification. This should be done in a way that does not undermine the knowledge and skills that a person with such a qualification should be expected to have.

Increasingly, employers are interested in specific skills and capabilities that employees can bring to the workplace rather than a complete qualification recognised by the AQF. Micro-credentials are skill-specific certifications that allow people to demonstrate that their skills and capabilities have been independently verified. Students gain skill sets in a specific technical area and receive a certification relatively inexpensively in a matter of days or weeks, unlike a traditional qualification that requires lengthy time and financial commitments. The AQF should recognise the increasing popularity of these certifications by ensuring there is a capacity for people to have prior skills and capabilities credited as they work towards a recognised AQF qualification. We do not, however, recommend that micro-credentials themselves be AQF qualification types, and thus these should not receive public funding or income-contingent loans.

Finally, for each qualification level within the AQF, there is a heavy reliance on expressing the notional volume of learning (measured in years) that is required to achieve the outcomes expected at each level. As learning technologies and teaching approaches evolve, the AQF should become more focused on learning outcomes and place less emphasis on the number of years of study in determining whether a person should receive a qualification of a particular level.

This does not mean that the time it requires to acquire a skill or knowledge is always an irrelevant consideration. It does mean that the time required to obtain a qualification should be reduced in recognition of skills and knowledge acquired in a workplace or alternative learning environment. There is a balance to be achieved here

to accommodate changes occurring in learning environments, to ensure Australia's qualifications framework remains relevant and fit for purpose and to uphold the reputation of Australian qualifications. There is a need to guard against the sort of high volume, low quality, 'unduly short courses' courses that ASQA has identified as a significant concern in the VET sector.



+ Recommendation 3:

A unified funding framework

The Australian Government should restore the demand-driven funding model for higher education and extend it progressively to other tertiary qualifications.

A tertiary education sector available to all Australians to develop their skills and knowledge is essential social and economic infrastructure. It ensures an adequate supply of skilled labour for economic development and competitiveness. It is critical to equality of opportunity and social mobility. It helps promote civil society.

As a consequence of growth in higher education numbers, the labour market for professionals is now reasonably well supplied by Australia's higher education system, with shortages generally limited to a few areas. In some areas the number of graduates significantly outstrips the number of quality graduate jobs that are available.

Most of Australia's chronic labour market shortages are for technicians and trade workers, and some trades have experienced shortages for a decade or more. Low training numbers are a contributing factor to this. The situation is unlikely to improve given the demand arising from the significant number of older experienced workers expected to leave these occupations in coming years.

This situation is in part attributable to government assistance currently being skewed to support participation in the Australian higher education system and not being equitably available to support participation in practical, employment-based and technical skilling and learning pathways. Policy change is required so that support is available to those who wish to

access trade, technical and vocational education on a comparable basis to that available for higher education.

With limited exceptions (such as presently exist with medicine), all courses of study or training leading to an AQF qualification should be funded according to student demand and not by government imposed quotas on the number of student places available. The great advantage of such a system is that it allows for it to be responsive to the needs of the economy, employers and students. Students do not make decisions in a vacuum. Most want a good job with a decent income and a secure future. It is the job of our tertiary education system to help all Australians achieve that objective.

Courses of study and training should be funded through a combination of direct government subsidies and student contributions, supported through income contingent loans. How each of these should be set is discussed in subsequent recommendations.

A considerable and focused effort would be required to ensure that this system remained affordable to government. This is not likely to be a surprise, as it is a statement that could be made about any of Australia's major systems of social support. The challenge is to put in place the right safeguards to ensure that it is not abused by unscrupulous providers or by citizens using it improperly.

There are already factors which function as limits on the availability of student places in certain courses, such as the availability of essential clinical placements and practicum opportunities. Nothing would prevent the level of direct government subsidy for a particular course being set to zero, if that was appropriate in the particular circumstances. If overconsumption of government support for education and training by students is a concern, this can be managed by a mechanism to limit consumption to a reasonable level consistent with the overall objective of making assistance generally available to all who can benefit from it.

The costs to government should be contained through:

- a more transparent approach to funding tertiary education that ensures teaching funding is separately identified and providers are accountable for its use (see recommendation 4 below);
- ensuring that the price of courses is based on the reasonable cost of teaching, with students making an appropriate contribution, as determined by an Independent Tertiary Education Pricing Authority (see recommendation 5);
- student contributions which are facilitated by access to a single, comprehensive income-contingent tertiary education loans scheme, subject to lending caps appropriate to each level of qualification (see recommendation 6);
- regulatory arrangements that ensure tertiary education providers are of high quality and committed to their educational missions (see recommendation 7);
- access by providers to the funding system being conditional on the continued achievement of positive student outcomes (see recommendation 8); and

 improving the information available to students and potential students to inform good study choices (recommendation 9).

By having an appropriate set of financial and other controls and by carefully staging the implementation of the reform program, it is possible to develop a system that is comprehensive for domestic students undertaking an AQF qualification, demand driven and affordable. It would require active monitoring and management of the overall system's cost.

The Australian Government should also intervene where required to support the operation of thin markets, including supporting place-based approaches for regional markets with low population density, and ensuring the viability of critical disciplines with low student volumes, such as foreign languages.

Demand driven funding for the Australian tertiary education system should be implemented progressively, with qualifications at AQF levels 1-6 being brought into the unified funding framework in three stages. While the Australian Government could achieve the reforms proposed in each stage by replacing the subsidies currently paid by States, in practical terms it is likely to require intergovernmental financial agreements through COAG. These would be necessary to support the various stages of implementation and to ensure that the legitimate interests of states and territories are taken into account as the Australian Government takes on greater funding responsibility.

In the **first stage**, qualifications at AQF levels 5 and 6 (Diploma, Advanced Diploma and Associate Degree) would be brought into the unified funding framework. To achieve this, it will first be necessary to determine the appropriate price for teaching of various disciplines at these qualification levels, and set the amount that students are required to contribute (see recommendation 5).

For VET qualifications at levels AQF 5 and 6, the Australian Government already contributes a substantial share of resourcing through VET Student Loans. States and territories withdrew considerable levels of subsidy from these qualifications when VET FEE-HELP was made available. Some of these reductions may subsequently have been reversed as loan availability was tightened. Consideration should be given to staging the introduction of what are currently VET qualifications into the unified funding framework ahead of moving to demand driven funding for higher education qualifications at these levels.

In the **second stage**, qualifications at AQF levels 3 and 4 (Certificate 3 and Certificate 4, including apprenticeships) would be brought into the demand driven system. These qualifications currently receive the majority of state and territory direct subsidies and this stage of development would involve the Australian Government taking responsibility for funding them.

Prior to bringing these qualifications into the unified funding framework, it will first be necessary to determine the appropriate price for teaching of various disciplines at these qualification levels, and set the amount that students are required to contribute (see recommendation 5). It would also be appropriate at this stage to consider the issue of recouping some of the Australian Government's additional costs from state and territories, given the significant reduction in their expenditures that would occur at this time.

These qualification levels involve a substantial volume of apprenticeship activity with student fees often being paid by employers. There is a case for some special consideration of the overall operation of the apprenticeship system within the proposed new tertiary education funding and regulatory arrangements. It would be

desirable that the system continues to encourage and support employers to contribute to the training of apprentices. The design rules should seek to preserve these contributions and appropriately apportion costs to employers, government and apprentices. There currently are regulatory arrangements additional to those which apply generally to the tertiary education sector. It is likely that at least some of these should continue, but there are questions about how that should best occur, an example being the arrangements for approval of 'contracts of training'.

In the third stage, the demand driven system would extend to qualifications at AQF levels 1 and 2 (Certificate 1 and Certificate 2). These include courses designed to provide foundation skills or to satisfy prerequisites for employment in a particular industry or occupation, such as a basic Occupational Health and Safety certification. These are generally less expensive courses that can be completed in shorter time frames.

In some States, governments have ceased providing public funding towards many qualifications at these levels. Determination of whether

these courses attract a public subsidy in future would depend on the assessment of the public and private benefits, and the government subsidy could be as low as zero (but thereby capable of increase at short notice if critical shortages appear). Students would, however, have access to the tertiary loan scheme to assist to finance their study, subject to borrowing limits and appropriate repayment arrangements. Consideration of the treatment of qualifications above AQF level 7 would occur only after the completion of the three stages described above.

The private and public benefits of tertiary education

It is widely accepted that tertiary education delivers both private and public benefits.

Individuals directly benefit from the education they receive. These private benefits include improved prospects of employment and higher lifetime earnings.

Higher levels of education also support economic growth and living standards, with broader benefits spilling over to the public through increased government taxation revenue and reductions in welfare and other social services expenditure. There is also evidence that increasing the number of graduates creates jobs for non-graduates.

The Australian, state and territory governments all make contributions towards the cost of tertiary education and usually expect students to make some form of personal contribution. As a general rule, it is better for students to make some form of contribution than no contribution at all, giving them at least some financial stake in achieving their chosen qualification.

In higher education, there is a reasonably well-established approach to financing undergraduate education in public universities and all students make a contribution to the cost of their education, supported by an income-contingent loan scheme. On average students contribute around 42% of the cost of an undergraduate degree, though the actual contribution varies significantly depending on the field of study. For example, students of business, accounting and law make a contribution of 84%, while students of medicine, dentistry and veterinary science make a contribution of 32%.

In VET, state and territory governments have considerably reduced public subsidies for diploma and advanced diploma qualifications (AQF levels 5-6) on the basis that students can now access a VET Student Loan made available by the Australian Government to pay for these qualifications. The student contributions for many of these qualifications is now effectively 100% of the cost.

At AQF levels 1-4, funding arrangements are opaque and differ between states and territories. It is frequently unclear to what extent governments, students and employers are sharing the cost of these qualifications. Student fees differ markedly from state to state.

The principle that students should make an appropriate contribution to the cost of their education underpins existing financing arrangements for tertiary education in Australia, though implementation has been patchy and in some cases there has not been a strong evidence base for the choices that governments have made over time.

If Australia is to move towards a more coherent funding system for tertiary qualifications, work will be required to evaluate the private benefits at each qualification level and then to structure government and student contributions for each qualification accordingly.



Recommendation 4:

Greater funding transparency and accountability

The Australian Government should ensure that the purposes for which grants are made to providers of tertiary education and student contributions are levied are clearly identified, particularly in relation to teaching and research. There should be clear accountability for the outcomes under each funding stream.

Through the Commonwealth Grant Scheme, higher education providers receive funding that is calculated according to the number of full-time equivalent Commonwealth supported students enrolled in units of study. This funding is a combination of direct government subsidies and student contributions and is known as base funding.

Once in receipt of base funding. universities and other higher education providers direct those resources internally at their discretion. Not all the funding is used for teaching. Some is used to support research, including academic research activities that are not funded by other sources. Some is used to support other activities of the institution, including community service. Universities have not been accountable for the specific ways in which base funding is used, although they are subject to broadbased reporting and accountability requirements.

There are some advantages of this approach. It has given universities a high degree of flexibility to direct resources to meet their most urgent or important institutional needs. It has also allowed them to cross-subsidise more expensive activities, including educational programs that are more costly for them to teach, from activities that they can deliver more efficiently or at a lower cost. And it has allowed them to make allocations of time to

academic staff to undertake research, including that for which there is no external funding. Most universities would prefer that this current level of flexibility continue.

However, the current approach also has significant disadvantages. The higher education funding arrangements have already been extended to some non-university providers who may not be incurring the non-teaching costs of public universities. In particular, they may not be engaged in research. This means they are not currently suitable to be simply extended to the full range of tertiary education providers. This issue has been acute in various government considerations about the demand driven funding of diploma and advanced diploma qualifications which currently receive greater funding in the higher education sector than is the case in the VET sector.

Lack of accountability hinders universities in making the case for adequate resourcing of particular activities and encourages governments to claw back resources through ad hoc 'efficiency dividends'. It drives many universities to pursue growth in student numbers, as this is the surest way to secure additional resources to support research activities that contribute to international rankings.

The current approach is also one of the drivers encouraging universities to become more comprehensive in scale and expand the range of qualifications that they offer students. Adding new study programs in disciplines that are already well-served has become one of the surest ways for an Australian university to grow. It may contribute little to the overall depth and diversity of the tertiary education sector and essentially be a grab for share of the existing market. A stark illustration of this is that 38 Australian universities have law schools, with 23 having been established since 1990.

With respect to teaching, there is some logic to funding universities on the basis of student numbers. However, it makes less sense to fund research activities of universities on the same basis, without regard to the research outcomes that are achieved. Funding for teaching should be allocated on the basis of a reasonable and appropriate cost of teaching. Funding for research should be allocated on the basis of research capacity and research delivery.

Public tertiary institutions (TAFEs and universities) also serve some community service purposes. Some regional universities operate in thin markets and may be using Commonwealth Grant Scheme funding to offset the higher costs of delivery in the areas in which they operate. To the extent that this is the case, the Australian Government should ensure that funding is adequate to meet identified community service obligations and any genuinely higher costs associated with regional delivery.

There is no consensus view on what proportion of base funding supports the teaching activities of universities. In 2011, a government review suggested that base funding should be discounted by 10% for nonuniversity higher education providers. In 2013, the Australian Government proposed that base funding should be discounted by 30% for non-university providers coming into an expanded demand-driven system.

Detailed technical work will be required to identify the reasonable and appropriate costs of teaching. We have proposed an independent tertiary education pricing authority for this purpose, and for the purpose of setting the maximum student contribution amount (see recommendation 5). Its work would be critical to disaggregating the funding for higher education paid through the Commonwealth Grant Scheme into separate funding streams for teaching, research and other activities.

To achieve this:

- the independent tertiary education pricing authority (see recommendation 5 below) should identify the reasonable and appropriate costs of teaching;
- the Australian Government should determine an alternative allocative mechanism for what is currently the research component of base funding, taking into account both research capacity and research outcomes;
- there should be a five-year period for transition to new funding arrangements for university teaching and research to allow universities time to plan and make adjustments to their current operating models.



* Recommendation 5:

Independent tertiary education pricing authority

The Australian Government should establish an independent tertiary education pricing authority. Working within overarching financial parameters set by the government, the authority would:

- determine the appropriate price for the teaching of various disciplines at different tertiary qualification levels;
- set the maximum amount of that price to be paid through student contributions, having regard to the expected private benefit at different tertiary qualification levels.

In the higher education sector, the origin of current prices for the delivery of Australian Government subsidised courses dates back to work on the relative funding model in the early 1990s. Periodic cost studies have been undertaken in an attempt to ascertain the costs of teaching and to provide a basis for financing adjustments. The methodological issues are complicated, high levels of crosssubsidisation add to the complexity and institutions are reluctant to expose the full details of their internal costing processes and resource allocations. More generally, institutions seek to protect their competitive positions.

In the VET education sector, funding arrangements are more opaque than in higher education and the outputs are more diverse. TAFE institutions have generally struggled to break even with the resources they have at their disposal and they have undergone successive waves of downsizing and cost control to remain financially viable. At the same time, many private providers have viewed vocational training as a lucrative business opportunity, leading to a rapid expansion in the number of registered training organisations seeking to compete with public providers for market share, particularly for popular

courses with low costs of delivery and strong student demand. The absence of a strong analytical framework within which to make informed judgements about pricing is even starker than for higher education.

If Australia is to develop a more coherent tertiary education system in which the contributions made by what we currently perceive as vocational education and higher education are each properly valued, two things are required. The first is that teaching activities required for each qualification are appropriately and reasonably costed and funded, and the second is that governments and students make an appropriate contribution to the cost of each qualification.

This would be a significant technical exercise requiring time and investment to complete. It would require financial, economic, actuarial and educational expertise to produce the outcomes that are required. This expertise does not currently reside within the Department of Education and Training or related agencies.

An independent tertiary education pricing authority would seek to develop a pricing framework to identify the reasonable costs of delivery of courses and the share of that cost which

should be contributed by students. Student shares would be developed having regard to expected future incomes, expected lifetime borrowings to support initial workforce entry and subsequent retraining and estimates of debt expected not to be repaid, based on the agreed loan repayment arrangements.

There are comparable agencies that operate in other sectors where it is important that governments have access to independent technical expertise with respect to price. The Independent Hospital Pricing Authority works to calculate and deliver efficient prices that inform ongoing funding arrangements for public hospital services. In New South Wales the Independent Pricing and Regulatory Tribunal makes evidence-based decisions to set prices for services delivered to consumers by government authorities. Both work closely with stakeholders and service providers to be able to make sound, evidencebased decisions about pricing.

The pricing authority would be established by an Act of Parliament and the Government would set overall financial parameters within which it would operate. Decision-making would occur in a transparent, orderly way through the publication of draft findings, opportunities for stakeholders to comment and publication of a final decision which would then have effect. Advance notice would be given of any changes to pricing arrangements and student contribution arrangements to allow providers and students sufficient time to plan ahead.





+ Recommendation 6:

A unified tertiary education loan scheme

Students should have access to a single income-contingent loan scheme that allows them to borrow in respect of their student contributions across the full range of tertiary qualifications.

HECS was Australia's first income contingent loan scheme and has been a very successful instrument for financing the expansion of opportunities for higher education study. In response to that success, it has been expanded on multiple fronts. There are now seven different schemes operating in areas of the tertiary education sector.

Each of these schemes has its own unique features and there are significant differences in the conditions under which students are able to use them. The rationale for these differences is not strong. Undergraduate higher education students in receipt of a government subsidy pay no loan fee. Undergraduate students who do not receive a government subsidy pay a 25% fee if they use the loan scheme. In the VET sector, loans are restricted to courses above the Certificate IV level. In these courses, students must pay a 20% fee if they use the loan scheme and do not receive a direct government subsidy. There is no rationale why some students are advantaged over others in this respect.

There are further inequities. Higher education students on an income support payment may qualify for a loan to assist them with study costs. Apart from apprentices who may get a loan to help them buy tools, no-one else in the VET sector can get a loan to help them with study costs. Yet again, higher education students are advantaged over others.

A redesigned income contingent loan scheme would provide students undertaking qualifications at all levels of the AQF with an opportunity to borrow to finance the reasonable direct costs of their education. Such a loan scheme would:

- remove any requirement for a student to pay tuition fees upfront;
- operate on the basis that qualifications at all levels would have the same loan fee (if any);
- include limits on the rate of borrowing and the total amount of borrowings to prevent students from incurring excessive debts and that, in aggregate, unpaid debt remains at a modest level;
- allow students to replenish their loan limits through repayment;
- have repayment arrangements integrated with the broader tax/transfer system, to ensure repayments are made only during years in which a person has a reasonable capacity to repay and do not impose a significant disincentive to work; and
- include arrangements for unpaid loans to be recovered from highwealth deceased estates.

The loan scheme would need to avoid the poor public policy outcomes experienced as a result of the rapid growth of lending under the disastrous VET FEE-HELP policy, which imposed no annual restrictions on the amount that could be borrowed to fund particular VET qualifications. Designed correctly, loan schemes can support the government's objective to ensure that the costs to both government and students are reasonable and not excessive.



+ Recommendation 7:

Regulatory arrangements

The Australian Government should tighten regulation in the VET sector, ensuring that regulation is responsive to the circumstances of tertiary providers, and integrate the regulatory activities of ASQA and TEQSA over time.

The origins and historical development of higher education and VET in Australia are significantly different. There are major differences in their approach to the delivery of tertiary education and pedagogy. This has given rise to quite different institutional environments and regulatory challenges.

In higher education, the barriers to entry for new providers have tended to be more substantial than in the VET sector. As a result there are approximately only 170 providers. Thirty-eight public universities educate the majority of students and these institutions are all self-accrediting. They generally have a culture of upholding their standards and they guard their reputations. They are often regarded as resistant to externally driven change. They have set the model for new providers seeking to enter the higher education sector. All higher education providers are required to have processes for course approval, academic and research integrity, and the monitoring, review and improvement of courses.

In the VET sector, institutional orientations have been driven by more practical considerations of stakeholders, such as industry needs for skilled labour, students seeking jobs and governments fostering economic growth. Institutions are not self-accrediting and currently most of the courses which they deliver are based on externally-developed,

nationally-agreed training packages which specify the competencies and assessment criteria required for the awarding of particular qualifications.

Over a considerable period of time, there have been efforts to lower the barriers to entry and there are now nearly 4500 providers accredited by ASQA and the Victorian and Western Australian accreditation authorities. While VET standards require training and assessment standards to be quality assured, there is much greater emphasis on compliance with externally imposed standards than having internal processes for the improvement of educational products.

While somewhat simplified, the above differences pose a major challenge to the development of a more unified tertiary sector. This is not helped by the continued operation of three separate registration authorities in the VET sector. Substantial efforts are required to restore the VET sector's reputation which has been severely damaged by a proliferation of low-cost low-quality providers, as well as providers seeking quick profits through excessively rapid expansion of their education business, in particular by taking advantage of an inadequately administered VET FEE-HELP program.

The Australian Government should ensure that regulation by ASQA and TEQSA is responsive to the circumstances of tertiary providers.

To raise the quality of vocational education and training, the Australian Government should tighten regulation in the VET sector by:

- raising the bar to entry for new providers, including ensuring they are able to demonstrate genuine capability and commitment to providing high quality VET;
- ensuring more graduated expansion of the scope of training;
- imposing greater requirements for providers to report on and be accountable for the quality of provision; and
- greater validation of the AQF qualification level of VET accredited courses.

The capability, and commitment to excellence and institutional missions of those providers remaining in the sector should be bolstered. Institutional missions should be required to be stated, and these should reflect a commitment to practical, employment-based and technical skilling and learning pathways, as well as a high degree of responsiveness to industry needs.

There should be a continuation of efforts to integrate the operations of ASQA and TEQSA. A merger of the two regulators would not of itself drive better regulation of the tertiary education sector and would potentially be a distraction from more urgent reforms. However, over time if the recommendations of this report were implemented and the tertiary education sector becomes subject to a unified funding framework, a merger of the regulators could follow.



* Recommendation 8:

Valuing teaching excellence

The Australian Government should develop an instrument to appraise and recognise excellence in teaching, as a companion to the Excellence in Research for Australia instrument that recognises excellence in research. A component of funding allocated to providers to support teaching should be contingent on teaching outcomes.

In our current system, there are many drivers for universities to invest in research and to thereby improve research outcomes. International rankings of universities such as the QS Rankings, Times Higher Education rankings and Academic Ranking of World Universities all draw to some extent, directly or indirectly, on research outcomes in assessing the relative performance of universities.

Within each university, research performance is a strong driver of academic career progression and a time-honoured pathway to academic promotion. Industrial instruments that govern the balance of academic work typically operate to constrain the volume of teaching that staff can be asked to do, freeing them to undertake research.

Research outcomes are also explicitly valued by the Australian Government through the various research funding schemes that operate. Competitive grant schemes reward assessments of potential research value and prior research performance. University research block grants are based on a formula which takes into account factors such as competitive grant research income, industry and other engagement research income and the number of PhD completions at each university. Since 2010, the Australian Research Council has periodically run the Excellence in Research for Australia (ERA) assessment exercise

to appraise the quality of research produced by each Australian university.

Universities exist to teach as well as research, but there are few external forms of recognition for excellent teaching within Australian universities, and previous attempts by government to value good teaching have faltered. To an outsider looking at the university system, teaching might seem not to carry anything like the priority or value of research.

The creation of an instrument that appraises and recognises excellence in teaching is a critical building block in realigning the Australian tertiary education system to value good teaching as highly as it values good research.

In the United Kingdom, quality of teaching is assessed by a Teaching Excellence Framework based on statistics such as completion rates, student satisfaction survey results and graduate employment rates. Universities are measured across teaching quality, learning environment, and student outcomes and learning gain.

Importantly, Teaching Excellence
Framework ratings do not measure
absolute performance but
performance against benchmarks
based on universities' student intake.
We know that not all students have
an equal likelihood of success at
university.

Completion rates are typically lower for part-time students, online students, students over 25 years of age, remote students, Indigenous students, students from low socio-economic backgrounds and students with lower university entry scores.

This presents challenges for some universities more than others. It is critical that any Australian instrument which measures teaching excellence takes into account and assesses the learning gain that providers have been able to achieve as a result of the education they deliver, and not just absolute outcomes.

In recommendation 4 above, it was proposed that the Australian Government should disaggregate funding for teaching from funding for research, and allocate it to providers based on drivers that were appropriate for each.

Funding for teaching would necessarily still principally be based on student numbers, but we need to go further than this. It should be based on student numbers and there should be some component based on the quality of education that universities deliver, as assessed by a teaching excellence framework, under whatever name. This component of funding would need to be more in the nature of a reward for teaching excellence, to ensure that it did not undermine the funding of courses based on the reasonable costs of teaching. This is another area in which a balance of objectives needs to be reached. There does need to be some financial incentive to strive for excellence in teaching.

Universities with a student cohort which has more challenging characteristics need to invest more heavily in teaching to achieve the desired educational outcomes. For example, the delivery of a program of undergraduate education at a university at which 45% of students come from low socio-economic status backgrounds will typically be far more resource-intensive and therefore more costly than at a nearby university where only 10% of students are from low socio-economic status backgrounds.

Funding for research would be allocated based on research merit and research performance. However, universities working with more challenging student cohorts typically perform less well on measures of research excellence. The reasons for this are partly historical, but they are also a function of their current circumstances and the socioeconomic circumstances of the populations they serve. They are often required to direct more of their resources to teaching and providing particular assistance to their students to achieve learning gain.

As Commonwealth Grant Scheme funding is disaggregated into separate teaching and research streams (Recommendation 4), we also need to recognise that universities which already invest more heavily in teaching to meet the needs of more challenging student cohorts should not be penalised or disadvantaged. Universities that are delivering programs that exceed benchmarks for student learning outcomes should have access to funding to support the additional investment in teaching required at their institution.





+ Recommendation 9:

Improving information on tertiary education outcomes

The Australian Government should improve information available to support the operation of the tertiary education 'marketplace' and assist students to make good educational choices.

There is good general awareness that the demand for high level skills is increasing and Australians have shown that they are prepared to invest time and resources to meet that demand, motivated in part by the belief that it will improve the quality and security of their lives. The recent expansion in the number of people undertaking higher education provides some evidence for this.

One of the significant unknowns is how the demand for knowledge and skills will change into the future and how existing professions, technical positions and the trades will change as new technology changes how we live and work.

Students require good information on outcomes to make decisions about the most suitable education and training options in which to invest their effort, time and money. They also require reasonable levels of consumer protection. Governments and regulators require good information to manage the overall environment in which these choices are being made, to ensure accountability for public money and to protect the system's reputation and standing.

For higher education, the Australian Government has undertaken a number of steps to improve information for students and influence university

enrolment and teaching practices. These include the development of the Quality Indicators for Learning and Teaching, which provide accessible information on student satisfaction and employment and salary outcomes. It is also engaged in efforts to improve the transparency of admission processes and to reduce attrition rates.

Australia now has a tertiary education system in which nearly three quarters of people aged under 40 years are participating. It is no longer sufficient for this large share of the population to rely on historical and dated views of the relative worth of institutions, the status of particular professions and the financial security attaching to various occupations and professions. These are all likely to change.

One of the hardest things to ascertain is the 'education valueadd' of an institution. We know that progression and retention outcomes at institutions that select students who have performed highly at school are generally better than institutions with more diverse student cohorts. What is less clear is the additional contribution being made by institutions to learning and skill acquisition by students after the different characteristics of those students are taken into account. This is what the teaching excellence framework discussed above would seek to promote and maximise.

Greater efforts to improve our knowledge of this aspect of institutional performance and to make this information available to students, would be highly valuable to inform student choice and to assist government and regulators to better understand the contribution of individual institutions.

There are also other sources of available information which are inadequately used to inform student decision making. For example, the Australian Government should seek to link data on education and training with student loan repayment data to develop a reliable picture of how much graduates of different qualifications at different tertiary education providers earn one, three, five and 10 years after they complete their qualification.



+ Recommendation 10:

Removing higher education provider categories

The use of the term university should continue to be restricted by law but not be based on a TEQSA classification of different types of higher education providers. Universities should no longer be compelled to undertake research that leads to the creation of new knowledge and original creative endeavour in at least three broad fields of study.

An organisation must be registered by TEQSA in order lawfully to provide higher education in Australia. Once registered as a higher education provider, an organisation may apply for membership of a special 'provider category' that enables it to describe itself using a particular term, all of which include the word 'university'.

The current number of providers in each provider category is outlined in the following table. These classifications are quite stable and most were previously determined by governments prior to TEQSA's creation. TEQSA's criteria for classification of higher education providers foreshadow the possibility of providers moving between categories.

The origin of TEQSA's categories lies in efforts to protect the international reputation of Australian higher education, particularly the reputations of its established public universities which are responsible for the bulk of Australia's education exports. A major impetus was provided by Greenwich University being authorised to operate in Australia by the Norfolk Island Government. Also relevant is one state government's decision to entice international universities to its state as a form of economic initiative. Private providers generally recognise that their status and commercial value is in being able to use the term 'university' in their organisation's name or in a

descriptor of their institutional type. It is a valuable term for marketing to students domestically and internationally.

A review of Greenwich University found it was not of sufficient standard to operate as a university in Australia and this resulted in the Australian Government passing legislation to protect the term university and effectively overriding the Norfolk Island government. At the same time, agreement of the states and territories was sought to a common approach to defining a 'university' and to this definition being used to limit the organisations to which the term applied. This broad approach has been refined several times and is now incorporated into TEQSA's regulatory approach.

Currently to be an Australian University, a higher education provider must have been authorised for at least the last five years to self-accredit at least 85% of its total courses of study, including Masters Degrees (Research) and Doctoral Degrees (Research) in at least three of the broad fields of study. It must undertake research that leads to the creation of new knowledge and original creative endeavour at least in those three broad fields of study.

The consequences of these developments have not been wholly positive. The approach has reinforced that providers should aspire to Australian
University

Australian
University College

Australian University
of Specialisation

Overseas
University

Overseas University
of specialisation

Higher Education Provider
(only)

'university' status. The arrangements enable a provider meeting the relevant criteria to move into the Australian University category and a pathway has been built for admission to this status through the University College category which is presently empty, and in fact has never had an incumbent. For those who cannot or do not want to undertake research in three fields of study, there is the University of Specialisation option. University status has been embedded in the regulatory framework as the pinnacle of a provider's development.

Another consequence is that providers can be removed from the Australian University category, in particular they can be removed if they do not undertake research that leads to the creation of new knowledge and original creative endeavour in at least three broad fields of study.

Those universities which obtain only small amounts of research funding under the competitive and performance-based allocative methods used to distribute research funding are effectively compelled to reallocate funds from other activities - basically teaching - by the current definition of a university. A major source of such additional funds is fees from international students. These students can be attracted by a university's international rankings, and in turn those rankings are heavily influenced by measures of research excellence. Dynamics such as this reinforce giving research expenditure pre-eminence over spending on teaching and they drive the crosssubsidisation of research.

TEQSA's task of ensuring that higher education providers meet high standards can be undertaken without it classifying providers into categories. It should continue to:

- have high threshold standards for registration as a higher education provider;
- make decisions about a provider's authority to self-accredit its courses and the scope of that authority; and
- ensure that research training is offered only where that training can be provided in an appropriately resourced and supervised environment of research activity, creative endeavour, inquiry and scholarship.

Australian governments should take responsibility for limiting the use of the term university in Australia to protect the reputation of our education exports. That is not far from the current situation, as one of the criteria for a domestic provider to be admitted to the three provider categories which use the term university is that the provider has the support of the relevant government - Australian, state or territory. We should be explicit that the matter is a decision for governments and that it is not open to an application process decided on the basis of criteria for admission to a category.

There are clearly alternatives to the current approach of specifying criteria for admission to a 'university' provider category. In Australia, the term has historically been used to apply to large public providers and it could remain so. The few exceptions could be retained simply as the product of history. Alternatively, the designation could be conceived as an 'honorary designation' for providers who had made a major contribution to the education and training of Australians over many years and it could be 'awarded' infrequently.

The removal of higher education provider categories would enable Australia to deal with an issue which is more important for the development of our tertiary education system than the nomenclature applied to providers. It would mean that the designation 'university' did not have to be taken away from a university if it decided its greatest contribution to Australia's tertiary education sector was to focus its resources on teaching or to specialise its research in one or two particular fields of study, rather than three.

It would potentially resolve a somewhat tortuous debate about 'teaching only' universities. This debate often carries an implication that the 'creation of new knowledge or original creative endeavour' could not occur in such an institution, a contentious proposition. There is simply no need for a debate about a new provider category for 'teaching only' universities.

The important issue has always been about who should be eligible to receive Australian Government research funds, and the debate about 'teaching only' universities has been a way of concealing a suggestion that such universities should be excluded from receipt of any research funds.

Research funds should be allocated where they will most effectively produce results for Australia. The issue concerning eligibility to apply for research funds should be considered and resolved around this principle alone. It should not be conflated with an unnecessary and arcane debate about nomenclature and provider categories. There is no reason why Australia, with its vast geographic spread, might not have a university predominantly devoted to teaching but also with a single world-renowned research institute attracting Australian Government research funds. There is no reason why it might not have a university devoted to teaching excellence or mastery in a field such as music, engineering or design.

ASQA does not have provider categories. Providers which are registered training organisations have a scope of registration which effectively specifies the training products which can be delivered, the assessments which can be undertaken and the AQF qualifications which can be issued.

RTOs have different scopes of registration with some being more comprehensive than others. There are some with relatively narrow scopes who develop a reputation for offering high quality courses with very strong outcomes for students. Organisations attain status and reputation based on these quality and outcome factors, rather than the comprehensiveness of their scope or their membership of a particular 'category' of registration.

In higher education, we also want institutions to attain status and reputation primarily on the quality of their offerings and the outcomes they produce for students.

Part five Conclusion

It is time to reimagine our tertiary education sector as an ecosystem of providers, regulated sufficiently to ensure quality of provision by fit and proper institutions, protect our students and enhance our national reputation in the world but otherwise freed up to develop more distinctive institutional missions. The distinction between higher and vocational education as it has evolved in Australia is incoherent and outmoded. In the future we may require new mixes of skills, capabilities and knowledge, and new pathways between types of qualifications. We will only know when the time comes, so we need to design the ecosystem to enable us to be adaptive and responsive. To return to Prime Minister Gorton's words from 1968, if we are to reach for the stars then we must reach for them with trained minds and skilled hands. We hope the recommendations in this report stimulate debate toward these ends.

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Ms Jeannie Rea, National President, National Tertiary Education

Mr Martin Riordan, Former Chief Executive Officer, TAFE Directors Australia

Mr Craig Robertson, Chief Executive Officer, TAFE Directors Australia

Ms Belinda Robinson FAICD, Chief Executive, Universities Australia

Mr Matthew Roper, Assistant Secretary of Education, Australian Government Department of the Prime Minister and Cabinet

Prof Chandravadan Shah, Adjunct Associate Professor, Centre for International Research on Education Systems (CIRES), Victoria University

Mr Luke Sheehy, Higher Education Policy Advisor, The Hon Tanya Plibersek, Deputy Leader of the Opposition, Shadow Minister for Education

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Dr Stephen Weller, Chief Operating Officer and Deputy Vice-Chancellor, Australian Catholic University

Ms Vicki Wilkinson, Division Head, Social Policy Division, Australian Government Department of the Treasury

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